10/748,865

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 * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 15:21:05 ON 15 SEP 2005

=> file reg

=> s montelukast/cn
L1            1 MONTELUKAST/CN

=> s montelukast
L2            2 MONTELUKAST

=> s l1 and l2
L3            1 L1 AND L2

=> s l1 or l2
L4            2 L1 OR L2

=> d 1-2
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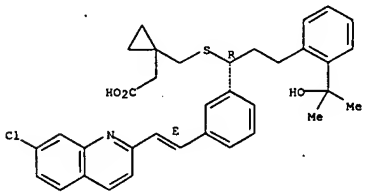
L4 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN
RN 158966-92-8 REGISTRY
ED Entered STN: 15 Nov 1994
CN Cyclopropaneacetic acid, 1-[[[(1R)-1-[3-[(1E)-2-(7-chloro-2-

quinolinyl)ethenyl]phenyl]-3-[2-(1-hydroxy-1-methylethyl)phenyl]propyl]thi
o]methyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclopropaneacetic acid, 1-[[[1-[3-[2-(7-chloro-2-

quinolinyl)ethenyl]phenyl]-3-[2-(1-hydroxy-1-methylethyl)phenyl]propyl]thi
o]methyl]-, (R-(E))-
OTHER NAMES:
CN **Montelukast**
FS STEREOSEARCH
MF C35 H36 Cl N O3 S
CI COM
SR World Health Organization (WHO)
LC STN Files: ADISINSIGHT, ADISNEWS, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,
CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CIN, DDFU, DIOGENES, DRUGU,
EMBASE, IMSCOSEARCH, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA,
MEDLINE,
MRCK*, PATDPASPC, PROMT, PROUSDDR, PS, RTECS*, SYNTHLINE, TOXCENTER,
USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

321 REFERENCES IN FILE CA (1907 TO DATE)
9 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
323 REFERENCES IN FILE CAPLUS (1907 TO DATE)

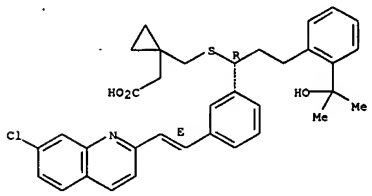
L4 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN (Continued)
113 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN
RN 151767-02-1 REGISTRY
ED Entered STN: 16 Dec 1993
CN Cyclopropaneacetic acid, 1-[[[(1R)-1-[3-[(1E)-2-(7-chloro-2-

quinolinyl)ethenyl]phenyl]-3-[2-(1-hydroxy-1-methylethyl)phenyl]propyl]thi
o]methyl]-, monosodium salt (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclopropaneacetic acid, 1-[[[1-[3-[2-(7-chloro-2-

quinolinyl)ethenyl]phenyl]-3-[2-(1-hydroxy-1-methylethyl)phenyl]propyl]thi
o]methyl]-, monosodium salt, [R-(E)]-
OTHER NAMES:
CN MK 476
CN **Montelukast monosodium salt**
CN **Montelukast sodium**
CN Singulair
CN **Sodium montelukast**
FS STEREOSEARCH
MF C35 H36 Cl N O3 S . Na
CI COM
SR US Adopted Names Council (USAN)
LC STN Files: ADISNEWS, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,
CAPLUS, CBNB, CEN, CIN, DIOGENES, EMBASE, IMSPATENTS, IMSRESEARCH, IPA,
MRCK*, PATDPASPC, PHAR, PROMT, PROUSDDR, PS, SYNTHLINE, TOXCENTER,
USAN,
USPAT2, USPATFULL
(*File contains numerically searchable property data)
CRN (158966-92-8)

Absolute stereochemistry.
Double bond geometry as shown.



● Na

111 REFERENCES IN FILE CA (1907 TO DATE)

10/748,865

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L5          410 L4

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        3351586 PREP/RL
L6           11 L4/PREP
                  (L4 (L) PREP/RL)

=> d ibib abs 1-11
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L6 ANSWER 1 OF 11 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 143:199868 CA
TITLE: Solid forms of montelukast
INVENTOR(S): Mestrovic, Ernest; Horvat, Michaela; Devcic, Maja; Avdagic, Amir; Ciccic, Dominik; Marinkovic, Marina
PATENT ASSIGNEE(S): Pliva- Istrazivanje I Razvoj D.O.O., Croatia
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005073194	A2	20050811	WO 2005-HR5	20050119

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-540307P P 20040128

AB The present invention relates to a new crystalline form and new amorphous forms of montelukast acid, to a process for their preparation, to pharmaceutical formulations containing them. Montelukast was prepared by the treatment of its sodium salt with a citric acid buffer. A crystalline form the acid was obtained which was characterized by x-ray crystallog.

L6 ANSWER 2 OF 11 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 143:97279 CA
TITLE: Process for the preparation of montelukast sodium and its intermediate
INVENTOR(S): Wang, Deping; Zhang, Yuliang; Li, Jing
PATENT ASSIGNEE(S): Beijing Aleznova Pharmaceutical Research Institute, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 16 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1420113	A	20030528	CN 2001-134866	20011116

PRIORITY APPLN. INFO.: CN 2001-134866 20011116

GI For diagram(s), see printed CA Issue.
AB The method comprises (1) conversion OH group of (S)-I (R1 = OH, R2 = CO2R, R = alkyl) to leaving group (R1 = mesyloxy or p-tosyloxy); (2) substitution with R3COSM (R3 = H, alkyl, or aryl and M = H or metal ion); (3) addition with MeMgX (X = Cl, Br, or I) to obtain (R)-I (R1 = SH, R2 = CMe2OH); (4) etherification with Me 2-(1-bromomethylcyclopropyl)acetate and hydrolysis to yield montelukast II, and montelukast sodium with NaOH.

L6 ANSWER 3 OF 11 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 143:78095 CA
TITLE: Process for the preparation of montelukast sodium and its intermediate
INVENTOR(S): Wang, Deping; Zhang, Yuliang; Li, Jing
PATENT ASSIGNEE(S): Beijing Shangdi New Century Institute of Biomedicine, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 16 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1428335	A	20030709	CN 2001-136946	20011226

PRIORITY APPLN. INFO.: CN 2001-136946 20011226

GI For diagram(s), see printed CA Issue.
AB The method comprises (1) conversion OH group of I (R1 = OH, R2 = CO2R, R = alkyl) to leaving group (R1 = mesyloxy or p-tosyloxy); (2) substitution with R3COSM (R3 = H, alkyl, or aryl and M = H or metal ion); (3) addition with MeMgX (X = Cl, Br, or I) to obtain I (R1 = SH, R2 = CMe2OH); (4) etherification with Me 2-(1-bromomethylcyclopropyl)acetate and hydrolysis to yield montelukast II, and montelukast sodium with NaOH.

L6 ANSWER 4 OF 11 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 142:463619 CA
TITLE: Process for preparation of montelukast by reaction of 2-[1-[(1R)-3-[2-(7-chloroquinolin-2-yl)vinylphenyl]-3-[2-methoxycarbonylphenyl]propylthiomethyl]cyclopropyl] acetic acid with methylmagnesium chloride or -bromide.
INVENTOR(S): Reguri, Buchi Reddy; Bollikonda, Satyanarayana; Chandra, Sekhar Bulusu Veera Venkata Naga; Kasturi, Ravi Kumar; Aavula, Sanjeev Kumar
PATENT ASSIGNEE(S): Reddy's Laboratories Limited, India; Reddy's Laboratories, Inc.
SOURCE: U.S. Pat. Appl. Publ., 8 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

this case

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005107612	A1	20050519	US 2003-748865	20031230

PRIORITY APPLN. INFO.: IN 2002-MA993 A 20021230

OTHER SOURCE(S): CASREACT 142:463619
AB A process for preparation of montelukast or a salt thereof comprises reaction of 2-[1-[(1R)-3-[2-(7-chloroquinolin-2-yl)vinylphenyl]-3-[2-methoxycarbonylphenyl]propylthiomethyl]cyclopropyl]acetic acid (I) or a salt thereof with MeMgCl or MeMgBr in an organic solvent. Thus, (E)-I dicyclohexylamine salt (preparation given) was treated with HOAc in PhMe to give the free acid; the resulting residue in PhMe/THF was treated with MeMgCl at 0-5° over 2-3 h to give montelukast.

L6 ANSWER 5 OF 11 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 142:435813 CA
TITLE: Solid-state montelukast
INVENTOR(S): Overeem, Arjanne; Van den Heuvel, Dennie Johan Marijn
PATENT ASSIGNEE(S): Synhton B. V., Neth.
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005040123	A1	20050506	WO 2004-EP11430	20041008
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005107426	A1	20050519	US 2004-960639	20041008
PRIORITY APPLN. INFO.:			US 2003-509957P	P 20031010

GI For diagram(s), see printed CA Issue.
AB A solid form of montelukast (I) can be obtained in solid state by precipitation from a solution containing the same. The compound is useful as leukotriene, antagonist and can be formulated into a pharmaceutical composition that also includes a pharmaceutically acceptable excipient. The Na salt of I is converted into I and tablets were prepared containing I.
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 11 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 142:38157 CA
TITLE: An improved method for preparation of montelukast acid and sodium salt
INVENTOR(S): Suri, Sanjay; Singh, Jujhhar; Sarin, Gurdeep Singh; Tanwar, Madan Pal; Mahendru, Manu
PATENT ASSIGNEE(S): Morepen Laboratories Limited, India
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004108679	A1	20041216	WO 2003-IN214	20030606
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			WO 2003-IN214	20030606

OTHER SOURCE(S): CASREACT 142:38157
GI For diagram(s), see printed CA Issue.
AB The invention relates to a preparation of montelukast acid sodium salt of formula I•Na in amorphous form, useful as leukotriene antagonist (no biol. data). The method comprises of following steps: (a) generating the dilithium dianion of 1-(mercaptomethyl)cyclopropane acetic acid by reacting with alkyl lithium, (b) coupling the said dianion with wet mesylate to get montelukast acid in crude form, (c) obtaining DCHA salt in crude form by adding dicyclohexylamine (DCHA) to crude acid obtained in the above step (b), (d) purifying and converting the said DCHA salt in crude form to montelukast acid in pure form, and (e) reacting the pure montelukast acid in a polar protic solvent with a source of sodium ion followed by evaporating the solvent and triturating of the residue with non-polar water immiscible solvent. For instance, I•Na was obtained from the prepared and purified I and sodium hydroxide with a yield of 98.7% (HPLC purity was 99.42%). The invention proposes industrially feasible and cost-effective process for high-yield and high-purity preparation of I•Na.
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 11 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 141:295677 CA
TITLE: The resolution of important pharmaceutical building blocks by palladium-catalyzed aerobic oxidation of secondary alcohols
AUTHOR(S): Caspi, Daniel D.; Ebner, David C.; Bagdanoff, Jeffrey T.; Stoltz, Brian M.
CORPORATE SOURCE: The Arnold and Mabel Beckman Laboratories of Chemical Synthesis, Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA, 91125, USA
SOURCE: Advanced Synthesis & Catalysis (2004), 346(2+3), 185-189
CODEN: ASCAF7; ISSN: 1615-4150
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The palladium-catalyzed aerobic oxidative kinetic resolution of key pharmaceutical building blocks was described. E.g., (S)-Br-3-C6H4CH(OH)(CH2)2C6H4-2-CO2Me, a Singulair precursor, was prepared with 92.9% ee via an 62.5% conversion oxidation reaction in air of the corresponding racemate using Cs2CO3, Pd(nbd)Cl2, and (-)-sparteine in Me3COH. Substrates investigated are relevant to the enantioselective preparation of Prozac, Singulair, and the promising hNK-1 receptor antagonist from Merck. The latter provides the most selective aerobic oxidative kinetic resolution yet described.
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 11 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 141:270736 CA
TITLE: A review of montelukast in the treatment of asthma and allergic rhinitis
AUTHOR(S): Nayak, Anjuli
CORPORATE SOURCE: Department of Pediatrics, University of Illinois College of Medicine, Peoria, IL, 61603, USA
SOURCE: Expert Opinion on Pharmacotherapy (2004), 5(3), 679-686
CODEN: EOPHF7; ISSN: 1465-6566
PUBLISHER: Ashley Publications Ltd.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review. Montelukast sodium (Singulair, Merck) is a selective and orally-active leukotriene-receptor antagonist (LTRA) that inhibits the cysteinyl leukotriene 1 (CysLT1) receptor. Montelukast is an effective and well-tolerated preventative treatment for asthma and allergic rhinitis in adults and children. The upper and lower airway show similar inflammatory responses to allergen challenge. Leukotrienes are inflammatory mediators that are known as the slow-reacting substance of anaphylaxis produced by a number of cell types including mast cells, eosinophils, basophils, macrophages and monocytes. Synthesis of these mediators results from the cleavage of arachidonic acid in cell membranes and they exert their biol. effects by binding and activating specific receptors. This occurs in a series of events that lead to contraction of the human airway smooth muscle, chemotaxis and increased vascular permeability. These effects have led to their important role in the diseases of asthma and allergic rhinitis. As these agents lead to the production of symptoms in patients that are asthmatic or allergic, the use of LTRAs, particularly montelukast, may seem appropriate. Clin. trials have shown that montelukast is effective and safe in the treatment of patients with asthma, allergic rhinitis or both diseases.
REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 11 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 139:185671 CA
TITLE: Novel anhydrous amorphous forms of montelukast sodium salt
INVENTOR(S): Reguri, Buchi Reddy; Bollikonda, Satyanarayana; Bulusu, Veera Venkata Naga Chandra Sekhar
PATENT ASSIGNEE(S): Reddy's Laboratories Ltd., India; Cord, Janet I.
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003066598	A1	20030814	WO 2003-US3700	20030207
WO 2003066598	C2	20031204		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: IN 2002-MA94 A 20020207

AB The present invention relates to novel anhydrous amorphous forms of alkali salts of montelukast, to processes for their preparation, to compns. containing them and to methods of treatment using the same. Montelukast is a leukotriene antagonist, useful as antiasthmatic, antiallergic, anti-inflammatory and cytoprotective agent.
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 11 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 128:135948 CA
TITLE: Montelukast sodium. MK-476. MK-0476. L-706631. Singulair. 2-[1-[1(R)-[3-[2(E)-(7-chloroquinolin-2-yl)vinyl]phenyl]-3-[2-(1-hydroxy-1-methylethyl)phenyl]propylsulfanylmethyl]cyclopropyl]acetic acid sodium salt
AUTHOR(S): Graul, A.; Martin, L.; Castaner, J.
CORPORATE SOURCE: Prous Science Publishers, Barcelona, 08080, Spain
SOURCE: Drugs of the Future (1997), 22(10), 1103-1111
CODEN: DRFUD4; ISSN: 0377-8282
PUBLISHER: J. R. Prous, S.A.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review, with 44 refs., of the synthesis, pharmacol., pharmacokinetics, and clin. trial of montelukast sodium for treatment of asthma.
REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 11 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 122:255522 CA
TITLE: Discovery of MK-0476, a potent and orally active leukotriene D4 receptor antagonist devoid of peroxisomal enzyme induction
AUTHOR(S): Labelle, M.; Belley, M.; Gareau, Y.; Gauthier, J. Y.; Guay, D.; Gordon, R.; Grossman, S. G.; Jones, T. R.; Leblanc, Y.; et al.
CORPORATE SOURCE: Merck Frosst Centre Therapeutic Res., Pointe Claire-Dorval, QC, Can.
SOURCE: Bioorganic & Medicinal Chemistry Letters (1995), 5(3), 283-8
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Structure-activity studies leading to the discovery of MK-0476 are described. The initial compound of this series was a potent leukotriene D4 (LTD4) antagonist, but was also a peroxisomal enzyme inducer in the mouse. Structure-activity relationships around the thioether chain were explored to remove this undesirable feature. It was found that alkyl substituents in the β-position relative to the carboxylic acid reduce the potency as a peroxisomal enzyme inducer while preserving the LTD4 antagonistic properties. Dialkyl substitution essentially eliminates the enzyme induction. The optimal styryl quinoline, MK-0476, exhibited high in vitro potency and in vivo activity on oral dosing without significant liver enzyme induction in the mouse.

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     FILE 'REGISTRY' ENTERED AT 15:21:24 ON 15 SEP 2005
L1             1 S MONTELUKAST/CN
L2             2 S MONTELUKAST
L3             1 S L1 AND L2
L4             2 S L1 OR L2

     FILE 'CA' ENTERED AT 15:22:04 ON 15 SEP 2005
L5           410 S L4
L6            11 S L4/PREP

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---Logging off of STN---


=>
Executing the logoff script...


=> LOG Y

STN INTERNATIONAL LOGOFF AT 15:22:43 ON 15 SEP 2005
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